

IN THE CLAIMS

1.-9. (Canceled)

10. (CURRENTLY AMENDED) A simulation method for a data record which describes three-dimensional processing by a CNC-controlled processing machine of a fabricated workpiece comprising the steps of:
determining an initial data record comprising idealized desired processing instructions for the processing machine;
determining a control data record for controlling the processing machine from the initial data record using an arithmetic unit which performs at least one transformation of the initial data record into said control data record;
selecting a data record from said at least one transformation;
generating a display data record from said selected data record indicating deviations of the fabricated workpiece caused by said at least one transformation and/or by deviations caused by the processing machine; and
determining at least one displaying the display data at least by a two-dimensional projection from the group consisting of the initial data record and the control data record and causing the at least one two-dimensional projection to be displayed.
11. (CURRENTLY AMENDED) The simulation method as claimed in claim 10, wherein at least one intermediate data record is determined from the initial data record, and the control data record is determined from the intermediate data record, and further wherein the display data record at least one two-dimensional projection is determined from the intermediate data record and caused to be displayed.
12. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 11, wherein the initial data record is a part program comprising at least one assigned traversing speed, traversing acceleration and track curvature, which are used to determine movements to be coordinated with one another in two stages comprising individual traversing options of the processing tool forming the control data record and the intermediate data record

13. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 12, wherein the part program can be transformed into a polynomial series having at least one assigned traversing speed, traversing acceleration and track curvature which are used to determine movements to be coordinated with one another of individual traversing options of the processing tool, and wherein the movements to be coordinated with one another form the control data record, and wherein the intermediate data record corresponds to the polynomial series.
14. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 10, wherein a final data record describing the actual processing can be determined by computation from the control data record with the aid of a model describing an actual response of the processing machine, and wherein at least one two-dimensional projection of the actual processing may be determined from the final data record and caused to be displayed.
15. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 10, wherein the response of the processing machine is described by machine parameters .
16. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 15, wherein the machine parameters can be at least partially changed interactively.
17. (PREVIOUSLY PRESENTED) The simulation method as claimed in claim 15, wherein the machine parameters comprise at least one dimension of a processing tool of the processing machine.
18. (CURRENTLY AMENDED) The simulation method as claimed in claim 10, wherein data records are selectively used ~~in determining the at least one two-dimensional projection~~for generating the display data record indicating said deviations.